

Large Lower Segment Myoma – Myomectomy at Lower Segment Caesarean Section – A Report of Two Cases

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ABSTRACT

Uterine leiomyoma is found in approximately 2% of pregnant women. One in ten women will have complications related to myoma in pregnancy. Myomectomy during pregnancy especially at Caesarean section is much discouraged in the literature. We present here 2 cases of large uterine myoma, situated in the anterior aspect of the lower segment, complicating pregnancy at term. Myomectomy in both instances allowed delivery of the fetus through the lower segment, making vaginal delivery in subsequent pregnancies possible.

Keywords: lower segment caesarean section, myomectomy

INTRODUCTION

The incidence of myoma associated with pregnancy is reported to vary between 0.3% and 2.6%^(1,2). Although a great majority of myomata discovered during pregnancy do not cause trouble and do not require treatment, Katz et al⁽³⁾ found that 10% to 30% of these women will present with some form of complication during pregnancy. These include first trimester losses, pressure symptoms caused by the myoma on the mother and fetus, pain of 'red degeneration', premature labour, premature rupture of membranes, malpresentations, retained placenta, postpartum haemorrhage and uterine torsion⁽⁴⁾. In a local study, the Caesarean section rate was noted to be as high as 73%, mainly due to obstructed labour and malpresentations⁽⁵⁾.

Rosadi et al⁽⁶⁾ in a longitudinal study on the growth of uterine myoma during pregnancy, found that myomata enlarge in 31.6% of cases and complications during pregnancy and at delivery are directly related to myoma volume.

When fetal malpresentations occur at term as a result of the myoma situated in the lower segment, myomectomy performed at the time of Caesarean section will allow delivery of the fetus through the lower segment as the following cases illustrate.

CASE REPORTS

Case 1

RAZ, a 27-year-old primigravida was referred to our

antenatal clinic. Her uterine size was larger than what was expected for her period of amenorrhoea. An ultrasound examination done revealed a single fetus corresponding to 14 weeks and a solid mass (10.6 cm by 13.6 cm by 13.5 cm) situated in the lower part of the anterior aspect of the uterus. Three months later, a repeat ultrasound examination revealed an appropriately grown fetus at 26 weeks gestation with no gross abnormalities and a fundal placenta. A mass of the same size was still present.

At 29 weeks gestation, her blood pressure was noted to be raised; this remained at 90 mmHg diastolic till delivery. There was no proteinuria. From 36 weeks gestation the fetus was in a transverse position and an elective Caesarean section was performed at 38 weeks gestation. Operative findings revealed a dextro rotated uterus with the fetal head in the left iliac fossa. Multiple subserous myomata (2 cm by 2cm) were noted over the anterior and posterior surface of the uterus. A large anterior lower segment myoma measuring 13 cm by 8 cm was present. The tubes and ovaries were normal.

A lower segment myomectomy via a transverse incision was first performed followed by Caesarean delivery of the female infant, through the same incision. A live baby weighing 3.2 kg with an Apgar score of 5 at one minute and 10 at ten minutes was delivered. Syntocinon (10 units) was given intravenously at the delivery of the anterior shoulder. The placenta was in the anterior upper segment and weighed 700 gms. A three-layer closure of the lower segment was performed with vicryl sutures.

Post-operatively, 40 units of syntocinon in one pint of normal saline was infused over 24 hours as prophylaxis to keep the uterus well contracted. The post-operative recovery was uneventful. No blood transfusion was given. The histopathological report was of a leiomyoma 'with areas of necrosis with a mitotic rate of less than 1 in 10 high power fields'. She was seen 6 weeks postpartum, the uterus had involuted and of normal size. Her baby was also well.

Case 2

RUS, a 33-year-old primigravida was referred by a general practitioner after being diagnosed to have a cervical fibroid at 16 weeks gestation when she

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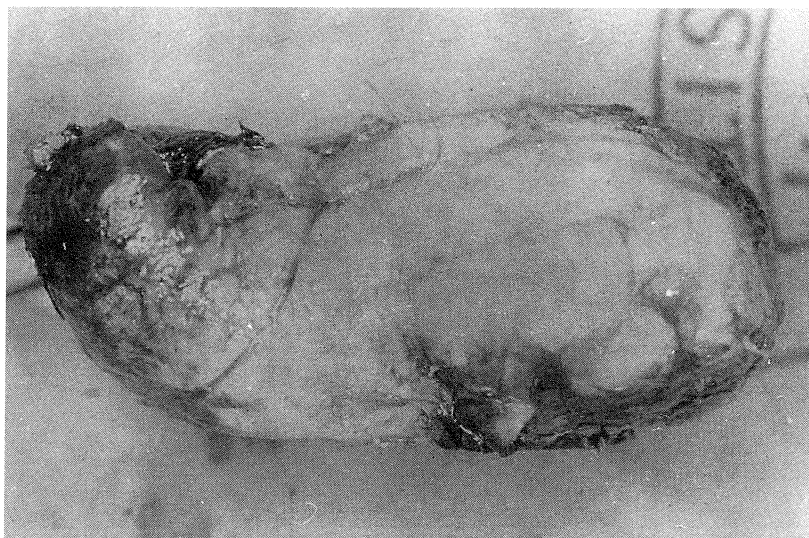


Fig 1 – A photograph of the large enucleated myoma of Case 2, measuring 11 cm by 7 cm by 6 cm.

presented with abdominal pain. She subsequently had 7 uneventful antenatal visits. At 37 weeks gestation, the fetus was found to be in a breech position. An ultrasound examination done at that time revealed an anterior lower segment myoma measuring 11 cm by 6 cm with degenerative changes. The fetal maturity corresponded to dates and there were no gross abnormalities. The placenta was fundal.

Laparotomy at 38 weeks revealed multiple myomata in the uterus with the largest measuring 11 cm x 7 cm x 6 cm (Fig 1) situated anteriorly in the lower segment. The baby was in breech presentation. A transverse incision was made in the lower segment; the large myoma was shelled out easily; the uterine cavity was subsequently entered and the baby delivered by breech extraction. The baby weighed 2.8 kg and had an Apgar score of 8 at one minute and 10 at ten minutes. Ergotmetrine (0.25 mgs) was given at delivery of anterior shoulder. The placenta weighed 580 gms. The tubes and ovaries were normal.

DISCUSSION

Although myomectomy in either the second or early third trimester has been described^(2,3,5,7), it is generally felt that it would be safer and more easily performed some months after delivery as an interval procedure. The mortality and the morbidity is slightly higher for myomectomy in the gravid as compared to the non-gravid uterus⁽⁴⁾. Additional to the general risks of myomectomy is the risk of abortion which occurs in 18% to 35% of cases⁽⁷⁾. An incomplete abortion may also result in severe endometritis especially if a communication channel to the recently enucleated fibroid bed is present⁽⁴⁾. There is increased vascularity of the gravid uterus, thus myomectomy performed in pregnancy has been reported to be associated with greater risk of haemorrhage and the need for blood transfusion^(5,8,9). Although the use of pitressin is said to help in reducing haemorrhage during myomectomy in a non-pregnant uterus, we did not find it necessary in both these cases.

The two cases described above illustrate that lower segment myomectomy (with incisions made over the fibroid), followed by delivery of the fetus through the lower segment can be safely performed. Enucleation of the fibroid is technically easier in the gravid uterus owing to the greater 'looseness' of the capsule⁽⁴⁾; retraction of the uterine muscle enhanced by syntocinon will help arrest haemorrhage. A three-layer closure of the incision is advocated in view of a larger surface area for closure. After the first continuous locking suture to obliterate the endometrial surface, a number of interrupted sutures were employed in both cases to obliterate the dead space. The surface stitch was carried out continuously with an atraumatic needle⁽¹⁰⁾.

Such an operation should only be carried out with optimal anaesthetic facilities and by an experienced surgeon who has already had extensive experience in interval myomectomy as he may on occasion be confronted by considerable blood loss.

Sufficient grouped and matched blood must be made available along with prophylactic broad spectrum antibiotics to combat infection. No prospective controlled study of myomectomy during pregnancy has to the best of our knowledge been published and there are only a few retrospective case studies available. These, however, do not deal with lower uterine segment myomata obstructing the line of incision. Myerscough⁽⁴⁾ suggested a posterior uterine incision in these instances. The two cases mentioned illustrate that myomectomy of a lower segment myoma will allow easy delivery through the lower segment and should be considered in carefully selected cases, this would also allow for vaginal deliveries in subsequent pregnancies.

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